# LONG TOM WATERSHED COUNCIL



#### January 2004

Monthly Meeting **Tuesday, January 27, 2004 6:30-9:00**Upper Long Tom Subbasin—Veneta Community Center

Please bring snacks to share - we'll do the drinks!

Upper Long Tom folks, please bring snacks.

#### **AGENDA**

(Facilitation by John Moriarty M.S.)

- 6:30 Sign-in, Browse Info, and Socialize
- 7:00 Welcome and Introductions
- 7:10 Conflict of Interest Policy

  Dave DeCou Steering Committee Chair
- 7:30 Invasive and Noxious Plants in the Long Tom Watershed, Part I

Panelists: Bruce Newhouse (Salix Associates), Wes Messinger (Corps of Engineers), Jed Colquhoun (OSU Extension), Greg Taylor (Corps of Engineers), Patrick Smith (BLM)

- 8:05 Break
- 8:15 Invasive Plants and Noxious Plants, Part II
- 9:00 Announcements and Reports
- 9:10 Wrap-up and Adjourn



Cindy measuring flows on Coyote Creek as part of our water quality monitoring program.

#### !!!Inside!!!

Invasive Species
Critter Condos
Tree sales and give-aways
Cox Butte Project-Part II

Tree Give-away coming up!

See details on pg. 7

#### **Our Mission**

The Long Tom Watershed Council serves to improve water quality and watershed condition in the Long Tom River basin through education, coordination, consultation, and cooperation among all interests, using the collective wisdom and voluntary action of our community members.

### **Watershed News**

## Off the Hook

#### By Jim Ekins

I have been spending quality time in my woodshop lately. The Long Tom Watershed Council had no newsletter in December and my writing duties have been in light demand. I'm off the hook in other ways as well. The fields are too wet to do much with, the fences are in good shape, and the ducks have gone elsewhere this winter. Instead, in the cool dryness of the shop, I filled holes. The crack in my barn boot is plugged with a bicycle tire patch and the hole in the fender of the truck with Bond-O.



Unlike me, some creatures welcome the sight of holes. Many birds and bats seek out holes in trees or buildings for nesting cavities. Unfortunately there are fewer old, "holey" trees around as humans have cleared and altered the landscape for homes, farmland, and timber production. If your yard lacks a log or snag, you can create attractive nesting and resting sites and then place them out of your way.

I started with bat boxes first. These are large by necessity, about 16½ inches wide, 24 inches tall, with an additional 6 inches hanging down from the back for a landing strip. A depth of 4½ inches provides internal space for three, ¾ inch chambers separated by plywood. I painted the boxes black to absorb heat from the sun.

Next I built smaller boxes for chickadees and nuthatches. The bottom of these boxes is 4 inches square with 5-inch tall sides and a gable roof of scrap cedar shakes. I used a spade bit to drill a 1¼ inch diameter opening in one end and a brad nailer to assemble the pieces.

Then I built 4-bedroom swallow colony boxes. I used cedar planks to make a 24-inch wide by 6-inch deep by 6-inch tall box with a sloping roof. The entry holes are 1½ inch in diameter and 1¼ inch in diameter for tree swallows and violet-green swallows respectively.

When building habitat boxes, be sure to know what the birds and critters are looking for. Specific guidelines and plans are available for the construction of many kinds of bird and bat boxes. For starters, the following are a few good websites:

North American Bat House Research Project: www.batcon.org/bhra/index.html

Cascades Raptor Center plans for a variety of birds: www.raptor-center.com/thingsdo.htm

**Birdhouse construction and placement:** 

Our most common bats, the little brown *myotis*, forage over water where their diet consists of aquatic insects, mainly midges, mosquitoes, mayflies, and caddisflies. They also feed over forest trails, cliff faces, meadows, and farmland where they consume a wide variety of insects, from moths and beetles to crane flies. Individuals can catch up to 1,200 insects in just one hour during peak feeding activity.

Each month, volunteer editor Jim Ekins arranges a column for the West Lane and Tri-County News on behalf of the Long Tom Watershed Council. Submissions of topics are always welcome, as is an offer to write a column, or a name of someone you think could. Authors get their names in the byline of the article! For more information, contact Jim at ekinsja@yahoo.com.

## Council Meeting Backgrounder

#### A SILENT INVASION

or millennia, mankind has transported other species of plants and animals around the world. Many were purposefully brought along to provide people with sources of food, fiber and shelter in their new homes, and have been thoughtfully managed and are staples of society and our culture. However, many other species have been stowaways in this long human journey, and created huge unintended impacts in these new environments. Some of the well-intentioned introductions have also exhibited tremendous competitive traits with native flora and fauna, colonizing and eventually dominating landscapes where they had not previously existed. Today we recognize these *invasive* species as a form of "biological pollution" which has very high consequences for our economy, our ecosystems, and our heritage. Cost to the US economy due



Nutria: Now if only fur hats would come back into vogue...

to invasive, non-native species is estimated at \$138 billion per year nationwide. In our watersheds, nonnative species present substantial challenges to our farmers, foresters, restoration managers, and landowners.

#### **DEFINITIONS**

*Invasive species* are defined as species that are (1) non-native, alien, or exotic to the ecosystem under consideration, and (2)whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health. Species that are prolific seed producers, have high seed germination rates, are easily propagated asexually by root or stem fragments, and/or rapidly mature, predispose a plant to being an invasive. Alien species that are predisposed to invasiveness have the added advantage of being relatively free from predators (herbivores, parasites, and disease) and can therefore expend more energy for growth and reproduction.

*Noxious Species* are defined as any living stage (including but not limited to seeds and reproductive parts) of any parasitic or other plant of a kind, or subdivision of a kind, which is of foreign origin, is new to or not widely prevalent in the United States, and can directly or indirectly injure crops, other useful plants, livestock, or poultry or other interests of agriculture, including irrigation, or navigation or the fish and wildlife resources of the United States or the public health (Federal Noxious Weed Act). The introduced Japanese beetle, for example, can cause extensive damage and expense in agricultural and horticultural industries by damaging nurseries, seedbeds, orchards, and field and truck crops. Noxious weeds also carry legal restrictions and can become a liability for property owners in some states.

Oregon, like all other states, faces a serious challenge in combating the spread of invasive species. Some, like Scotch broom, Himalayan blackberry, and reed canary grass are already widespread, while others, such as the gypsy moth, and the fungus *Phytophthora ramorum* which causes "sudden oak death" are currently being held at bay by aggressive prevention and containment efforts. Although we most often think of plants when we talk about invasive species, we are truly being attacked on all fronts. Our waterways are under threat from aquatic invaders such as zebra mussels, mitten crabs, nutria, bull frogs, and other species that live in or near our streams and rivers. Insects such as the aforementioned gypsy moth and cereal leaf beetle threaten crops critical to Oregon's agricultural industry. Plant, animal, and human pathogens can also be considered invasive species and are often the hardest to prevent and combat. Even feral pigs now threaten parts of central Oregon not only through their penchant for digging up everything in sight, but by acting as major vectors for disease transmission as well. With a problem that is this multifaceted, what can citizens do to stem the tide?

Continued on pg. 4...

## Council Meeting Backgrounder

#### INVASIVE SPECIES, WHAT TO DO?

There are tools we can bring to bear in dealing with invasive plants and animals. Many institutions, including those in the agricultural, land management, and academic arenas, have extensive experience and abundant information about invasive species. These agencies can provide information about dealing with invasive species in your area.

On an individual level, the simplest thing you can do is not introduce non-native species in the first place. Seems easy enough until you look at the plant section of your local greenhouse or hardware store. Looking over a sea of tiny trees and flats of bedding plants, do you know which might be invasive? Which might carry problem insects or plant diseases? A simple solution is to fill your planting needs at one of the many native plant nurseries in our area. These operations also serve as outstanding sources of information about which native plant might best suit your needs and growing conditions. Not being a vector for spread of invasives also requires a certain amount of diligence in your other activities. Never releasing fish or pets into the wild is a no-brainer, but how about checking your boat propeller for traces of invasive aquatic plants such as milfoil?

Once invasive species are established, removal and control becomes more difficult. (Think blackberry!) Property owners and land managers often employ an array of different techniques including chemical, mechanical, and biological control. (Did you know sheep will graze down young blackberry shoots?) The methods employed are often dictated by the species, degree of establishment, site conditions, and landowner preferences. Seeking a professional opinion is always a good idea and there are many good sources of information out there. The links that follow are just a few of the many websites dedicated to invasive species and should put you on the right path to identifying, avoiding, and removing invasive species. In addition, the speakers at this month's council meeting have a wealth of information about invasive species and how to control them.

http://www.invasivespecies.gov/ http://www.oda.state.or.us/index.html Parts of this narrative were originally drafted and furnished by Rick Hayes for use as part of Willamette Restoration Initiatives Willamette Restoration Strategy.

#### **Conflict of Interest Policy**

#### by Dana Erickson, Coordinator

At this upcoming meeting, Steering Committee will present their recommendation for a conflict of interest policy, which we have created with examples from standard non-profit policies. The essence of ours is that a) we require declaration of all potential and acutal conflicts of interest, b) Steering members with conflicts will be excused from decision-making on those subjects, and c) we allow a volunteer to contract for paid work with the Council but only at less than half-time equivalent and only such that this situation is more the exception than the rule.

This subject came up because we have a Steering Committee member who is now a quarter-time contractor for us this year. We have currently postponed her participation in Steering decisions pending Council approval of this policy.

We will bring the full one-page policy and full one-page member's statement to the Council meeting for you to read, available beginning at 6:30 p.m., and Dave DeCou will present the policy thoroughly during the meeting. If you are interested in reading the policy before that, please email Dave to request the document at <ddecou@comcast.net>.

## **Projects & Monitoring Update**

By Cindy Thieman, Projects & Monitoring Coordinator

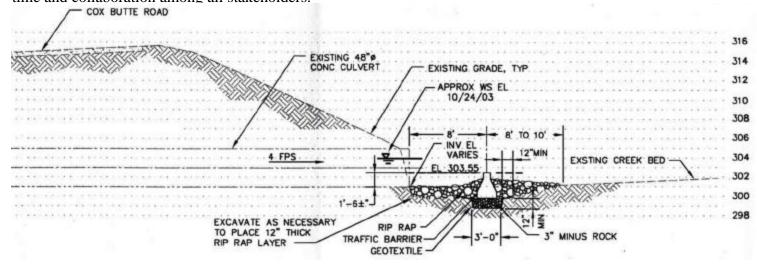
#### Long Tom Fish Passage Assessment Project: Part 2

In part 1 of this article in the November newsletter, I described the basis for studying fish passage at two sets of culverts at Cox Butte Rd. and the Long Tom River. Modeling results show that when 3 out of 4 levee culverts are blocked from November through May (for flood control purposes), the one culvert that remains open is impassable to fish during most of this time period. Alternatively, if the levee culverts are not blocked they are not a fish passage barrier. However, the set of culverts under Cox Butte Road become a fish passage barrier during much of the winter because the water level at the inlet of the road culverts is higher that at the outlet, creating a velocity barrier.

Like many other natural resource management challenges, providing fish passage through both sets of culverts and flood reduction will require a multifaceted solution. To address fish passage at the Cox Butte Rd. culverts, a team of two engineers designed a method to backwater the culverts by placing concrete road barriers four feet downstream of their outlet (see **Figure 1**). This would slow the velocity through these culverts enough to allow fish passage when all four levee culverts were open.

The levee culverts present a bigger challenge because there is no way to back water or otherwise modify the culverts to provide fish passage when three out of four culverts are blocked. One solution that has been put forward is to install screw gates on three of the culverts so that they can be regulated throughout the winter. This solution may make it possible for the culverts to be closed for a relatively few number of days during the winter when Long Tom River levels are high. Unfortunately, it is difficult to know exactly how many days the levee culverts would need to be blocked to provide sufficient flood reduction. And for that matter, we do not know how much flood protection blocking the levee culverts actually provides.

Clearly, this flooding-fish passage dilemma requires us to look at the bigger picture. For example, flooding along the 3.5 mile section of the historic Long Tom (refer to the map in your November newsletter) is not solely a result of water coming through the levee culverts. It is also caused by the fact that Ferguson Creek was straightened and disconnected from its floodplain several decades ago, causing water to rush down from the surrounding hills with greater velocity and volume than it did historically. Reconnecting Ferguson Creek with its floodplain and restoring wetlands within this sub-watershed has tremendous potential to reduce flooding downstream and restore habitat for fish and wildlife. This kind of restoration effort will take time and collaboration among all stakeholders.



**Figure 1.** Cross-sectional view of backwatering design for fish-passage at Cox Butte Rd. culverts.

### **Council News**

#### Ways to help

**Creek Basin Problem-Solving** - We have an opportunity open for one or more people to work on problem solving water quality and habitat issues in individual creek basins with landowners. We have done this program before and will provide clear supervision and support. The work would entail creating background materials and potentially some maps to support landowners in each of a few select creek basins as they work to understand the water quality and habitat situation in their area, and problem-solve ways to address it. This could be done as a volunteer or a graduate-level internship and could make for a terminal project or thesis work. **Timeline:** Between now and June 2005 for part or all of that time.

**Conservation Strategy** - In addition to helpful members from our Technical Team, and other entities naturally interested in the conservation strategy, there is an opportunity open for Council members or graduate-level interns to work on developing the conservation strategy. The type of work could vary widely and would depend on your skill and interest. See the description in this newsletter of the developing strategy and also remember there is a strong education component as we work with the Council members to develop and support the Strategy. **Timeline:** Between now and October 2004, for part or all of that time.

**Fundraising Strategies -** We are looking for Council members to join some Steering Committee members on the Resource Development Committee in order to gain the necessary funds to support the Council's work in the next few years. Please contact Scott Duckett at scott.duckett@ci.eugene.or.us.

#### **Monitoring Program Receives Favorable Review**

The OWEB grant review team has given our water quality monitoring program a favorable review, ranking us 4th out of the 25 proposals recommended for non-capital funds statewide. Although OWEB has not yet received the federal funds that will support these projects, it appears likely that they will. This means the council will likely receive the \$90,445 we requested from OWEB to bring total monitoring funding for 2003-05 (including in kind contributions) to \$150,128. The following quote was taken from the review.

"This proposal funds a water quality monitoring project using the most cost effective components of its baseline monitoring program while redirecting more costly components to focus on problem areas identified in previous monitoring. Reviewers liked this approach of building on previous findings, making monitoring more efficient, and selecting new sites to identify priority areas for restoration work. This council successfully used monitoring information to identify specific problems, and to translate the information into on the ground action. The council has a good record of volunteer involvement and outreach, making it one of the more successful councils in using data to plan and implement restoration actions. Reviewers believed this proposal represents high benefit and a high degree of certainty."

The support and dedication of our members shows in the reputation we have throughout the state. Thanks once again to all the volunteers who give of their time and their spirit to make this council what it is.

#### **Quarterly Contract Review**

Quarterly contract review for Projects and Monitoring Coordinator Cindy Thieman will be held the week of February 16th. Please submit any comments by February 14th to Mike Kesling at mikek@surecrop.com, (541) 998-1121.

"You cannot affirm the power plant and condemn the smokestack, or affirm the smoke and condemn the cough"

- Wendell Berry, The Gift of the Good Land, 1981.

### **Watershed Calander & Events**

## Calendar of Events (Details on following pages)

Saturday, January 24th

East Lane SWCD Annual Meeting

12:00-Noon

**EWEB** Cafeteria

Saturday, February 7th

Birding with WREN

8:00-Noon

Stewart Pond

Sat-Sun February 7th and 8th

Benton SWCD Tree & Shrub Sale

Corvallis

Saturday, February 14th

"A Beaver's Tale" family program

10:00-Noon

West Eugene Wetlands Yurt

Saturday, January 17th, 24th, and 31st,

Tree Planting Middle Fork Willamette

Watershed Council

9:00am-1:00pm.

Elijah Bristow State Park

Saturday & Sunday, February 21st and 22nd

**Exploring Nature with Acrylics &** 

Pastels at Neptune Scenic Viewpoint

Neptune Beach

Limit: 10 People (Preregister)



**Coldest temperature ever recorded in** Eugene?

-12°F on Dec 8, 1972.

### Tree Give-Away

Our annual tree give-away is coming up! Pending seedling viability test results, the date for tree pickup at the council office is February 13th from 1:00-5:30pm.

Last year we gave away around 800 western red cedar trees, complete with planting and nurturing instruction from local experts, and hope to match that this year. As in past years, people who plan to plant the seedlings in riparian areas where cedars were historically present will be given first priority for trees.

Western red cedar grows best in moist to wet soils, with lots of nutrients. They are tolerant of shade and long-lived, sometimes over 1,000 years. Because of their resistance to decay and insect damage, the wood of large, fallen trees remains sound for over 100 years. Even after 100 years, the wood can be salvaged and cut into shakes for roofs.

Trees should be reserved in advance. Anywhere from 10-100 trees may be available per person depending on the total number of seedlings we receive from Roseburg Resources Co.

For more information and to reserve your trees: Call Cindy Thieman, Projects and Monitoring Coordinator at 541-683-2983.

A sapling weathers the recent ice storm near the West Eugene Wetlands Office.



#### Thank You!!

Bob Hager and Nancy Hunt (Eugene BLM), for printing and mailing assistance.

#### Watershed Events continued...

#### **Benton Soil and Water Conservation District**

#### Annual Native Tree & Shrub Sale

February 7th and 8th, 2004

Orders are being taken NOW and are reserved on a first-come, first-served basis!

To receive an order form as an attachment, email

swcdtrees@peak.org or call (541) 753-7208

Early each February, the District distributes tree seedlings at low cost to local landowners wishing to provide erosion control, windbreaks or native habitat enhancement on their land. Advance tree order reservations are taken on a first-come, first-served basis starting in mid-December until the end of January.

Seedlings are sold in bundles of 5 or 10. We also offer two types of *Backyard Wildlife Packet*. Each packet contains 2 each of 7 different shrub species plus one conifer seedling; see order form for details. There is a limit of 10 bundles per species per person to ensure that everyone has a chance to take advantage of our low prices. Prices range from \$7.50 – \$20.00 per bundle of 10. Generally, we sell bare root seedlings, with some exceptions. Our suppliers are local plant nurseries that grow natives.

Mail-in orders must be postmarked by January 31, 2003

#### **ELSWCD Annual Meeting**

The Annual Meeting of East Lane Soil & Water Conservation District will be held in the EWEB Cafeteria on Saturday January 24, 2004. The meeting will commence with lunch at 12:00 and adjourn around 2:00PM. The public is encouraged to attend.

#### Native Restoration on Amazon Creek

The Rachel Carson Students planted salvaged camas bulbs and Potentilla in the Checkermallow Access and removed European birch from the banks of Amazon Creek with Stream Team on the 12th of November. On November 22nd, 34 volunteers planted trees and shrubs along Amazon Creek behind the Lane County Fairgrounds. The project was a partnership between Stream Team, the Fairgrounds and the Jefferson/Westside Neighbors. Warren Wong and his staff installed temporary irrigation, hired Lane Metro Youth Corps to remove blackberries and provided approximately half of the plant material. Half of the plants came from the volunteer run Native Plant Nursery. The Jefferson/Westside neighbors and other Stream Team volunteers will provide maintenance. The entire length of the Fairgrounds property along the creek will be converted to natives. For more information, contact Lorna Baldwin, Eugene Stream Team (541) 682-4850, email: lorna.j.baldwin@ci.eugene.or.us.

Contrary to popular belief, the ubiquitous carp was not an escapee from fish farms or backyard ponds. During the years 1879-1896 the US Fish Commission distributed 2.4 million carp for stocking throughout the US and other countries for both food and sport.

### Watershed Events continued...

#### February Programs in the West Eugene Wetlands

To register or for more information call Holly McRae at 683-6494 or email at west\_eugene\_wetlands@hotmail.com.

Birds Birds Birds!
Saturday, February 7th, 2004
8am-noon

Limit: 15 participants

Join naturalist Steve Gordon for a morning of bird watching. Meet at Stewart Pond, then to Meadowlark Prairie. Wear appropriate clothing and boots. Bring a snack.

## "A Beaver's Tale" Family Program Saturday, February 14<sup>th</sup>, 2004 10am-noon

The beaver is Oregon's state mammal, the largest North American rodent, and a resident of the West Eugene Wetlands. Come hear stories and learn about the variety of unique adaptations that are required for the beaver's lifestyle. We will take a short walk to look for signs of this nocturnal animal. Wear appropriate clothing for cold/wet weather. Meet at the West Eugene Wetlands Yurt at the corner of W. 11th and Danebo.

Exploring Nature with Acrylics & Pastels at Neptune Scenic Viewpoint February 21<sup>st</sup> & 22<sup>nd</sup> (Evening orientation on Monday the 16th)

Location: Neptune Beach Scenic Viewpoint

Limit: 10 participants

During the 2½ day class, discover the pleasure of painting with acrylics and/or pastels with local artist & naturalist Charlie Johnston. He will provide individualized instruction to bring out your strengths and enhance your confidence as learn to see nature through the eyes of an artist. Whether you are a beginner or an established artist, this is an opportunity to learn about color, composition, and perspective. We will spend two days at Neptune Scenic Viewpoint, 3 miles south of Yachats. Benches set on a cliff above the beach provide an excellent view of Cumming Creek, wildlife and the rock-pounding waves. Students will be responsible for bringing their own supplies. There is a \$25.00 fee for this class.



As part of a long-term habitat restoration project in Elijah Bristow State Park, The Middle Fork Willamette Watershed Council will be planting 1000 trees at the confluence of Lost Creek and the Middle Fork of the Willametter River. The Project aims to restore an area that has been taken over by invasive noxious weeds.

When: Saturday, January 17th, 24th, and 31st, 9:00am-1:00pm.

**Where:** Meet at 9:00am at the second parking lot on the left as you enter the park.

What to Bring: Warm clothes, raingear, work gloves, shovels if you have them.

For more information: call 937-9800 or email mfwwc@efn.org

## Council Meeting Notes (November)

We had 2 excellent presentations at our November council meeting.

The first by Gary Holm and Cindy Thieman described the problem with fish passage at Cox Butte and solutions to this problem. Cindy further described the problem in the November newsletter.

Several Solutions were presented at the meeting. The most promising at this time is to block 3 of the 4 culverts on the upstream side and create a weir downstream from the Cox Butte culvert. The weir themselves would be 2.5' x 12' traffic barriers that would be partially submerged and anchored by 1' rip-rap at its base. The desired result is to cause some backwatering without a cascade effect. Jack Detweiller and Jim Crane developed schematics of the plan.

The plan is still under review and will be adapted to address flooding, erosion and other issues. The landowner Gary Holms believes that just blocking 2 of the culverts will probably be adequate. More data and modeling will be developed before implementation.

The second presentation by Anna E. Scott, Dennis Todd, and Steve Wisnovsky outlined water enhancement projects by the Oregon Country Fair, (OFC). The OCF site includes 375 acres of wetlands uplands, forests and prairies on 2 sides of the Long Tom River. The site also has parking lots, roads, campsites and other man made structures for the fair.

#### Projects include:

Long Tom River bank erosion mitigation with native plants. In the past, up to 20' of bank erosion over 15 years in a few places has occurred. Did you know that the OCF has it's own native plant nursery?

Native species effluent uptake experiment with the city of Veneta to determine value of native species in effluent uptake plantations. Eight trees and twelve shrubs and plants are being evaluated for soil water extraction and chemical analysis. Grants from OWEB, Oregon Cascades West Council of Governments and others help fund the experiment.

Indian Creek enhancement with a budget of \$118,220. - constructed channel. Project to improve year round connectivity and habitat in ¼ mile of its length. Created meanders on north banks and planted trees on south banks. Four culverts replaced and one removed entirely.

Wetlands consolidation project. Project to create land suitable for the City of Veneta wastewater uptake system. Some of the poplars you see along Hwy 126 are on OCF land.

Future improvement projects include improving habitat for the western pond turtle, and waterfowl.

Borrow pit enhancements east of Long Tom River.

Wetlands Mitigation partnership opportunities.

OCF has an excellent web page to view some of these projects and other neat stuff at www.oregoncountryfair.org, "What Else" menu item.

To conclude our meeting, Dana briefed the council on the various committees within the council that individuals can get involved in. Current Committees include Finance/budget, Program, Technical and Annual Celebration. No one person can, or is doing it all, but there are apples still hanging on the tree. Please pick one that you like. Volunteers make the council run. Ask Dana for a new volunteer form where you can express your interests and talents.

Dana solicited feedback on council meetings in general. Responses included;

Liked the informed presentations and being able to see what others were doing.

Likes it whenever science behind decisions to do something is included with presentations. Would like to see discussions focused on specific projects with Q & A period.

Likes to see mix of business and education. x2

Discussions generally not taking place, Is that O.K.?

Group needs to be oriented around something.

Suggest 1 (educational) presentation per meeting, but more in depth.

1 person wanted more business at meetings.

1 suggestion to have more than 1 meeting per month.

Counter response was that attendance needed to be higher to do that.

1 suggestion to have high business component at meetings 3 times a year

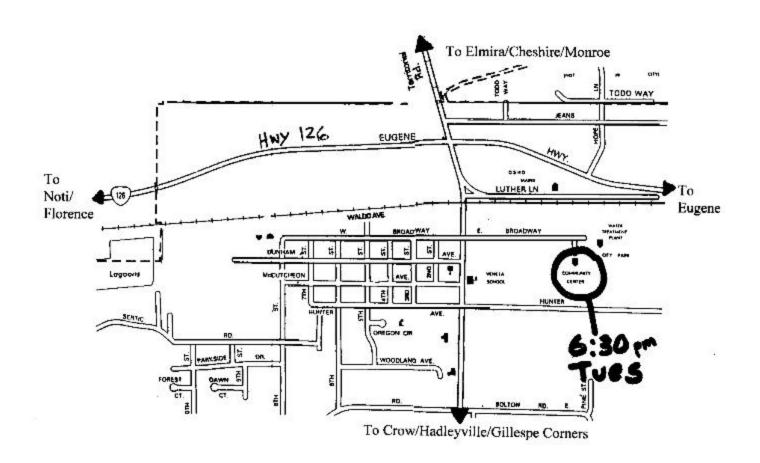
1 really likes field tours incorporated into meetings. Doing this now in spring/summer, winter too?

Thanks to Duane Zentner for taking notes!

Dana primed the council on the Conservation Strategy to be developed in the near future. Time did not allow for a proper introduction. Stay tuned for more in upcoming council meetings and newsletters.

## Watershed Map





Long Tom Watershed Council

Phone: 683-6578 e-mail: longtom@efn.org www.longtom.org

751 S. Danebo Avenue Eugene, OR 97402